

Background

- ❖ Historically, medical geneticists (physicians) and genetic counselors have provided genetic services; however, multiple workforce analyses reveal a gap between genetic services and the current genetics workforce¹
- ❖ Additional providers, such as PAs, are needed to bridge this gap, alleviate the genetics provider shortage, decrease patient wait times, and increase access to genetics services²⁻⁴
- ❖ Genetics PAs can evaluate a patient for a genetic disorder; assess a patient with a genetic disorder; perform a physical/dysmorphology exam; order and interpret genetic testing; prescribe medication; and develop treatment plans. Some genetics clinics are utilizing PAs²
- ❖ This study aimed to characterize the current landscape of PAs in the medical genetics workforce

Methods

- ❖ The Clinical Genetics Advanced Practice Provider (CGAPP) Workforce Committee emailed a 35-question survey to the Genetics APP Listserv in the fall of 2023. In this study (PMID: 39268716), a genetics APP was defined as a PA or nurse practitioner who works more than 50% of their clinical time in medical genetics.
- ❖ The Self Regional Healthcare IRB granted the study exempt status
- ❖ A descriptive and cross-sectional analysis was performed on a subset of responses, specifically from genetics PAs, and compared to PAs in all specialties
- ❖ Categorical analyses were assessed with chi-square tests or Fisher's Exact test when counts were small. Ordinal analyses were assessed using the Cochran-Armitage trend test. A P-value < .05 was considered statistically significant.

Results

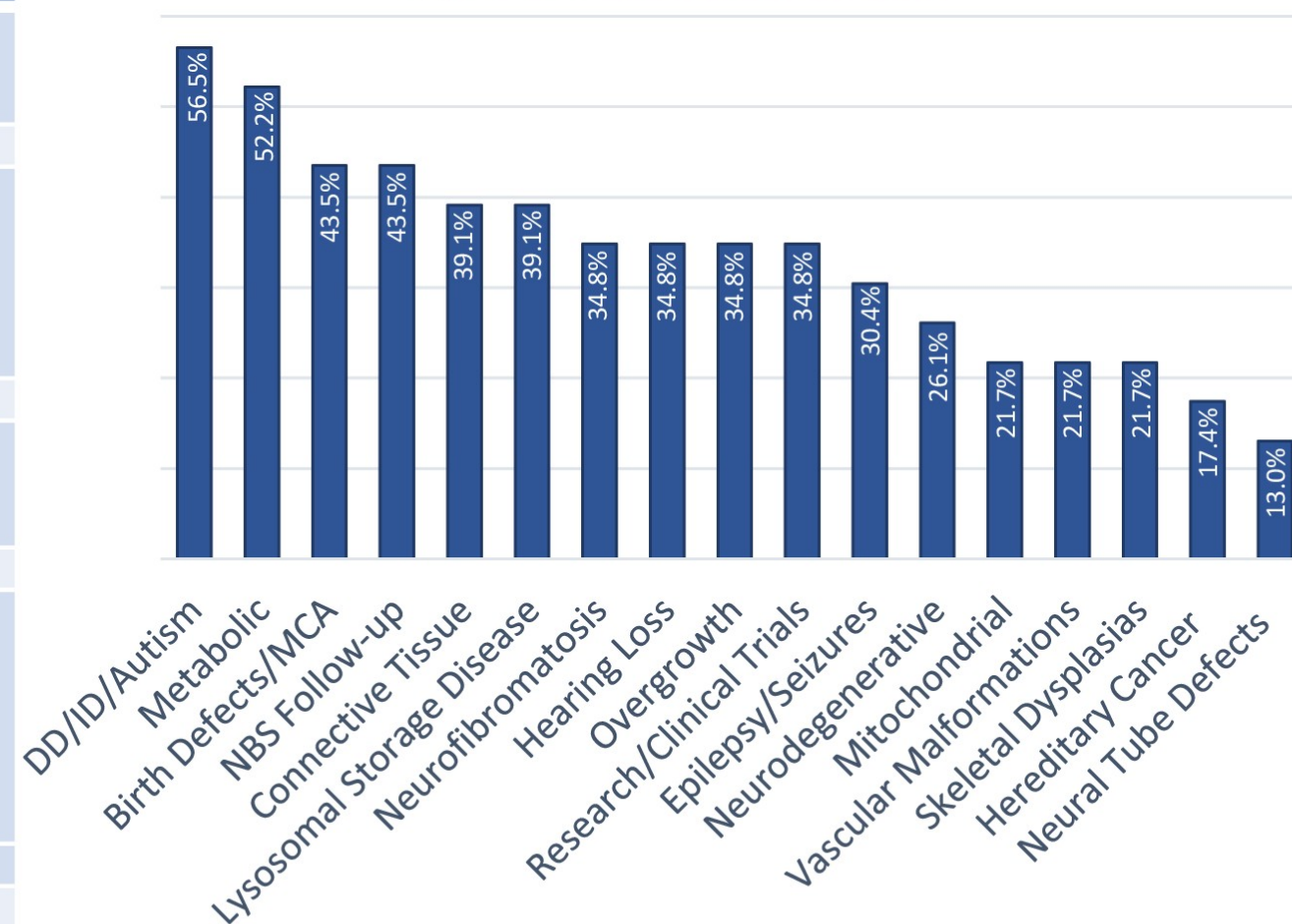
Demographics of Genetics PAs vs. PAs in All Specialties

	Genetics PAs	PAs in All Specialties ⁵	P-value ^a
Age:			
< 30	21.7%	17.8%	0.0636
30-39	34.8%	38.8%	
40-49	17.4%	23.1%	
50-59	21.7%	12.5%	
> 60	4.3%	7.8%	
Gender:			
Female	91.3%	71.2%	0.0363
Male	8.7%	28.8%	
Other	0.0%	0.1%	
Race:			
White	87.0%	79.9%	< 0.0001
Asian/Pacific Islander	4.3%	7.4%	
Hispanic/Latinx	4.3%	7.2% ^b	
Multi-Racial	4.3%	2.6%	
Black	0.0%	3.6%	
Other	0.0%	2.7%	
Degree:			
Associate’s	0.0%	0.7%	0.7972
Bachelor’s	4.3%	12.9%	
Master’s	91.3%	82.6%	
Doctorate	4.3%	2.4%	
Other	0.0%	0.6%	
Average per Week:			
Patients Seen	14	69	< 0.00001
Hours Worked	41.1	39.7	0.5849
Telemedicine:	91.3%	42.7%	<0.0001
Burnout (≥1 Symptom):	60.9%	34.1%	0.0068
Intent to Leave Position:	4.3%	9.3%	0.7182
Job Satisfaction:			
Career as a PA	95.7%	83.1%	0.1600
Work-life Balance	82.6%	71.7%	0.3542
Income/Salary	95.7%	75.2%	0.2620
Benefits	100.0%	72.9%	0.0014
Employer	95.7%	74.4%	0.0156

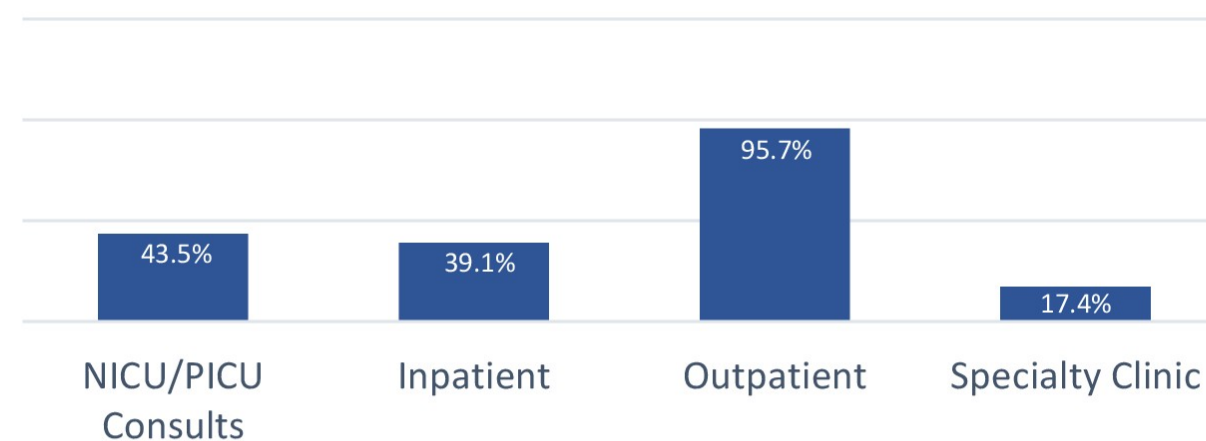
^aP-value may be slightly skewed as practicing genetics PAs are included in the total number of PAs

^bNCCPA had Hispanic vs. non-Hispanic as a separate question

Types of Patients Evaluated



Visit Types



DD – developmental delay; ID – intellectual disability; MCA – multiple congenital anomalies; NBS – newborn screening; NICU/PICU – neonatal/pediatrics intensive care unit

Key Points

- ❖ A total of 23 genetics PAs (95.8%) completed the survey, representing 0.013% of the PA workforce
- ❖ PAs evaluate and treat various patient types and populations in multiple clinic settings
- ❖ The median age of genetics PAs and all other PAs was 38 years (P = 0.9493)
- ❖ PAs in medical genetics were more likely to identify as female, identify as White, have a Master's degree, reside in the South, and participate in telemedicine compared to all PAs
- ❖ Genetics PAs had higher levels of job satisfaction, including career as a genetics PA, work-life balance, income/salary, benefits, and employer
- ❖ Genetics PAs worked more hours (mean of 41.1 vs. 39.7) and saw fewer patients per week (mean of 14 vs. 69)
- ❖ Burnout was higher among genetics PAs; however, the intent to leave clinical practice was lower

Conclusion

- ❖ Genetics PAs represent a needed and growing resource within the medical genetics clinic. Understanding the characteristics and role of PAs in genetics is essential in quantifying their contribution to the overall medical genetics workforce, supplementing the known shortage. Data from this study will also help guide employers and genetics organizations to utilize PAs at the top of their scope.

References

1. PMID: 33941882
2. PMID: 39268716
3. PMID: 37467203
4. PMID: 37561671
5. NCCPA: Statistical Profile of Board Certified PAs